Claims

1. A self-service distribution system, comprising an e-commerce system and locker terminals connected with the e-commerce system via a network, the e-commerce system comprising an order-placing subsystem, a warehouse and distribution subsystem, and a locker management subsystem,

wherein the locker terminals are used for storing items or packages ordered by customers and allowing the customers to pick up the ordered items or packages therefrom;

wherein, the order-placing subsystem is used by a customer to place an order online and transmit the order to the distribution subsystem for execution, the order-placing subsystem comprising a locker reservation determination module, the locker reservation determination module being configured to, in response to a selection of a specific locker terminal by the customer, access the locker management subsystem to determine whether vacant locker resources are available for dropping off the ordered items or packages;

wherein the warehouse and distribution subsystem is used for storing and managing the items, preparing the items according to the order and shipping the items from the warehouse, and for a carrier to deliver the ordered items or packages to the locker terminal selected by the customer; and

wherein the locker management subsystem is interfaced with the order-placing subsystem and the warehouse and distribution subsystem, to receive information transmitted by the locker terminal and sending instructions to the locker terminal to manage the locker terminal, the locker management subsystem comprising a locker resource management module for recording whether each locker in the locker terminal can be reserved, the locker management subsystem configured to set a reserved locker to a reserved status upon receiving an indication that the customer has placed the order successfully and set the reserved locker to a vacant status after a predetermined period of time from completion of dropping the ordered items.

2. The self-service distribution system according to claim 1, wherein one of the warehouse and distribution subsystem and the locker management subsystem comprises a pick-up voucher module for sending a pick-up voucher to the customer upon completion of item dropping.

3. The self-service distribution system according to claim ~~1~~2, wherein the locker terminal comprises a validation module for validating the pick-up voucher input by the customer.

4. The self-service distribution system according to claim 1, wherein the locker terminal comprise a transmitter for transmitting information to the e-commerce system after the carrier has dropped the items or packages to the locker terminal or the customer has picked up the items.

5. The self-service distribution system according to claim 1, wherein the order-placing subsystem comprises a distribution mode selection module for allowing the customer, when placing an order online with the order-placing subsystem, to select the distribution mode of self-service locker pick-up as well as a specific locker terminal.

6. The self-service distribution system according to claim 1, wherein the lockers are located in at least one of the supermarkets, libraries, parks, corporate buildings, and residential quarters.

7. The self-service distribution system according to claim 2, wherein the pick-up voucher is one of a delivery code, a digital validation code or an electronic bar code.

8. The self-service distribution system according to claim 5, wherein the

order-placing subsystem displays to the customer the locker terminals available when the customer selects the distribution mode of self-service locker pick-up.

9. The self-service distribution system according to claim 8, wherein, in the case where the customer has previously selected the distribution mode of self-service locker pick-up, the order-placing subsystem displays by default the locker terminal previously selected by the customer.

10. A self-service distribution method, comprising:

receiving an order placed online by a customer through an order-placing subsystem, wherein the customer has selected the distribution mode of self-service locker pick-up;

displaying, by the order-placing subsystem, the locker terminals available to the customer for dropping off ordered items or packages;

in response to the customer selecting a specific locker terminal, accessing a locker management subsystem to determine whether vacant locker resources are available at the specific locker terminal for dropping off the ordered items or packages, the locker management subsystem comprising a locker resource management module for recording whether each locker in the locker terminal can be reserved, the locker management subsystem configured to set a reserved locker to a reserved status upon receiving an indication that the customer has placed the order successfully and set the reserved locker to a vacant status after a predetermined period of time from completion of dropping the ordered items;

upon determining that vacant locker resources are available for dropping off the ordered items or packages at the selected specific locker terminal, sending, by the order-placing subsystem, the customer’s order to a warehouse and distribution subsystem;

delivering, by the warehouse and distribution subsystem, the ordered items or packages to the locker terminal selected by the customer;

sending information, by the locker terminal, to a locker management subsystem

or the warehouse and distribution subsystem to notify completion of the dropping;

sending, by the locker management subsystem or the warehouse and distribution subsystem, a pick-up voucher to the customer; and

picking up the items by the customer with the pick-up voucher.

11. The self-service distribution method according to claim 10, further comprising: after the customer has picked up the items, sending, by the locker terminal, information to the locker management subsystem to notify that the lockers of the locker terminal can be reserved.

12. The self-service distribution method according to claim 10, further comprising: setting the locker in a “vacant” status after a predetermined time period from completion of the dropping.

13. The self-service distribution method according to claim 10, wherein a locker terminal previously selected by the customer is displayed by default in the case where the customer has previously selected the distribution mode of self-service locker pick-up.

14. The self-service distribution method according to claim 10, further comprising: automatically setting, by the warehouse and distribution subsystem or the locker management subsystem, an order exceeding a predetermined period of time as an outdated order.